

RESPONSE UNDER 37 C.F.R. § 1.111
U.S. APP. NO. 09/487,729

setting key which causes a receiver to scan all channels, after which all of the scanned channels which contain a broadcasting signal are automatically memorized. This has a disadvantage in that a specific menu must be set, which is inconvenient in practical use.

According to one aspect of the present invention, a channel memory device is provided which operates such that when a user tunes a receiver to a channel desired to be viewed by the user, the device determines whether or not a broadcasting signal is present, and, if a broadcasting signal is present, the device stores the channel in memory. Later, when the user enters a channel up or a channel down key, the device will tune to the next higher/lower channel stored in memory.

Summary of Shim et al

Shim et al relates to a high speed channel detection apparatus and related method. Shim et al seeks to increase the speed at which a channel is recognized as containing a broadcasting signal. In order to achieve this increase in speed, Shim et al determines whether or not the broadcast signal is present based upon an automatic gain control signal. This discrimination is used during an automatic scan of the channels. In more detail, as shown in Fig. 10, a high speed automatic channel storage method is provided in which all channels are set to determine whether or not they contain a broadcasting signal, and if so, the numbers of the channel which contain broadcasting signals are stored in memory. See col. 7, lines 4-35. This automatic search is facilitated by determining whether or not a broadcasting signal is present in a tuned channel based upon an automatic gain control signal. According to another aspect of Shim et al, when a user selects a channel using key matrix 16, microcomputer 18 discriminates whether any

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synchronous signals are input from the AD input end, and if so, carries out the AFT adjusting operation to seek a positive signal for AFT by adjusting the tuning data little-by-little upward or downward, while comparing the AFT voltage with the reference value. See col. 9, lines 1-18 and step SB5 of Fig. 11.

Analysis of the claim rejections

In rejecting claims 1-2 under 35 U.S.C. § 102(e) as being anticipated by Shim et al, the Examiner provides analysis which purports to show that Shim et al discloses each of the claimed features. Applicant respectfully submits that claims 1 and 2 are patentable over Shim et al for at least the following reasons.

Claim 1 recites “a controller for receiving the channel number output from the key input and storing the channel number output from the key input in the memory while controlling the tuner to tune to a broadcasting channel corresponding to the received channel number.” In the Office Action, the Examiner states that the claimed controller is met by microcomputer 18, shown in Fig. 6 of Shim et al.

→ However, in accordance with the description of this reference set forth above, Applicant submits that Shim et al does not store the channel numbers output from a key input. Rather, Shim et al stores channel numbers based upon an automatic channel scanning process. Thus, Shim et al is not different from the prior art described on page 1 of the present application. The aspect of Shim et al which describes individually tuning a specific channel in response to a user's key input (col. 9, lines 1 +) does not involve storing the channel information.

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With respect to claim 2, this claim further describes that "the controller receives a signal output from the signal processor, determines whether a broadcasting signal is present in the currently tuned broadcasting channel and stores the corresponding broadcasting channel number in the memory only if said broadcasting signal is present." In the Office Action, the Examiner states that this feature is met by the disclosure of Shim et al at col. 6, lines 53-58, that the "microcomputer 18 discriminates whether there exist any broadcast signal on the pertinent channel of the basis of the IF AGC supplied from the intermediate frequency signal processing unit 12 through the level shifter 22. If a broadcast signal is discriminated, then microprocessor 18 stores such channel data in the memory 17." This portion of Shim et al, however, is in the context of an *automatic channel scan*. This is evident from the sentence immediately preceding the sentence quoted by the Examiner: "Microcomputer 18 outputs a series of tuning data from the automatic channel storage mode to tuner 11 and drives simultaneously the speed-up drive units 19 and 20 for high speed tuning." Thus, because the microcomputer 18 outputs a *series* of tuning data, this does not relate to a situation in which a user enters a single channel, but rather, relates to an automatic frequency scan.

In view of the above-described differences between Shim et al and the invention as defined in claims 1 and 2, Applicant respectfully submits that Shim et al does not anticipate, or render obvious, the invention as defined by claims 1 and 2.

With respect to the rejection of claims 3-4 under 35 U.S.C. § 103 as being unpatentable over Shim et al in view of Beery, Applicant submits that Beery does not make up for the noted

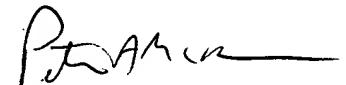
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deficiencies of Shim et al. Accordingly, Applicant submits that claims 3-4 are not unpatentable over the combination of Shim et al and Beery.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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